Listing of Claims:

1. (Currently amended) A network comprising a plurality of Nodes interconnected by Links, wherein:
   (a) each Node is assigned a set of one or more coordinate labels, each representing a path comprising one or more Links or other Nodes;
   (b) each coordinate label is unique to the Node to which it is assigned;
   (c) a path between a first Node and a second, non-adjacent Node being determined from one of said coordinate labels ~~associated with~~ assigned to said first Node and one of said coordinate labels ~~associated with~~ assigned to said second Node; and
   (d) a pair of said Nodes that are connected by said Links stores the set of one or more coordinate labels corresponding to the other Node of said pair of Nodes.

2. (Original) The network of claim 1 wherein each Node of said pair of Nodes reroutes any data intended for the other Node of said pair of Nodes in the event said other Node of said pair of Nodes moves or fails.

3. (Currently amended) A network comprising a plurality of Nodes interconnected by Links, wherein:
   (a) each Node is assigned a set of one or more coordinate labels, each representing a. path comprising one or more Links or other Nodes;
   (b) each coordinate label is unique to the Node to which it is assigned;
   (c) a path between a first Node and a second, non-adjacent Node being determined from one of said coordinate labels ~~associated with~~ assigned to said first Node and one of said coordinate labels ~~associated with~~ assigned to said second Node; and
   (d) at least one of said plurality of Nodes is automatically replicated to create at least one mirror Node.

4. (Original) The network of claim 3 where said at least one mirror Node is mobile.

5. (Original) The network of claim 3 where said replicated Node is mobile.

6. (Original) The network of claim 3 where said replicated Node is a part of the World Wide Web.

7 (Original) The method of claim 3 wherein a packet is routed to a closest Node of said plurality of mirror Nodes.

8. (Currently amended) A network comprising a plurality of Nodes interconnected by Links, wherein:

(a) each Node is assigned a set of one or more coordinate labels, each representing a path comprising one or more Links or other Nodes;

(b) each coordinate label is unique to the Node to which it is assigned;

(c) a path between a first Node and a second, non-adjacent Node being determined from one of said coordinate labels ~~associated with~~ assigned to said first Node and one of said coordinate labels ~~associated with~~ assigned to said second Node; and

(d) at least one of said plurality of Nodes automatically creates at least one cache and redirects a data request to said at least one cache.

9. (Original) The network of claim 8 where said at least one cache is mobile.

10. (Original) The network of claim 8 where said at least one cache contains a load from a mobile Node.

11. (Currently amended) A network comprising a plurality of Nodes interconnected by Links, wherein:

(a) each Node is assigned a set of one or more coordinate labels, each representing a path comprising one or more Links or other Nodes;

(b) each coordinate label is unique to the Node to which it is assigned;

(c) a path between a first Node and a second, non-adjacent Node being determined from one of said coordinate labels ~~associated with~~ assigned to said first Node and one of said coordinate labels ~~associated with~~ assigned to said second Node; and

(d) at least one of said plurality of Nodes is a mobile Node.

12. (Original) The network of claim 11 where said mobile Node is a PDA.

13. (Original) The network of claim 11 where said mobile Node is a cellular telephone.

14. (Original) The network of claim 11 where said mobile Node is a laptop computer.

15. (Original) The network of claim 11 where said mobile Node is a router located on a vehicle.

16. (Original) A method for determining a path from a source Node to a destination Node in a network comprising a plurality of Nodes interconnected by Links, said Nodes including a first Node, and a plurality of second Nodes, said second Nodes including said source Node and destination Node, said method comprising the steps of:

(a) assigning to each of said second Nodes, including said source Node and said destination Node, one or more coordinate labels, each coordinate label assigned to a second Node representing a path through said network from said second Node to said first Node;

(b) determining a path from said source Node to said destination Node by combining one coordinate label of said source Node and one coordinate label of said destination Node; and

(c) at one of said second Nodes, storing one or more coordinate labels of a second Node adjacent to said one second Node.

17. (Original) The method of claim 16 wherein at said one second Node, rerouting data intended for said second Node adjacent to said one second Node in the event said second Node adjacent to said one second Node Nodes moves or fails.

18. (Currently amended) A Node for use in a network, said network comprising a plurality of Nodes connected by Links, wherein:

(a) said Node for use in said network has one or more coordinate labels assigned thereto, each coordinate label representing a path from said Node to a particular

other, non adjacent Node of said network, each of said coordinate labels being unique to said Node; and

(b) said Node stores one or more coordinate labels corresponding to an adjacent Node.

19. (Original) The Node of claim 18 wherein said Node reroutes any data intended for said adjacent Node in the event said adjacent Node is moved to a different location.

20. (Original) The Node of claim 18 wherein said Node reroutes any data intended for said adjacent Node in the event said adjacent Node is unable to receive said packet.